

CLAIMS

We claim:

- 1     1.     A system comprising:
  - 2         a.     a programmable first unit configured to translate programming information into
  - 3             one or more remote control codes; and
  - 4         b.     a signal transmitter coupled to the first unit, the signal transmitter configured to
  - 5             translate the remote control codes into control signals for controlling a recording
  - 6             device and to transmit the control signals to the recording device.
  
- 1     2.     The system of claim 1, wherein the first unit comprises a program server coupled to the
- 2         signal transmitter.
  
- 1     3.     The system of claim 2, wherein the program server is configured to generate the
- 2         programming information and to translate the programming information into the remote
- 3         control codes.
  
- 1     4.     The system of claim 2, further comprising a remote host coupled to the program server
- 2         and to the signal transmitter, wherein the program server is configured to generate the
- 3         programming information and the remote host is configured to receive the programming
- 4         information and to translate the programming information into the remote control codes.
  
- 1     5.     The system of claim 4, wherein the program server is coupled to the remote host over a
- 2         wide area network.
  
- 1     6.     The system of claim 5, wherein the wide area network comprises the Internet.

- 1     7.     The system of claim 4, wherein the program server is coupled to the remote host over a  
2           local area network.
- 1     8.     The system of claim 1, wherein the programming information corresponds to an  
2           occurrence of a program.
- 1     9.     The system of claim 8, wherein the program is a broadcast video program.
- 1     10.    The system of claim 8, wherein the program is a broadcast audio program.
- 1     11.    The system of claim 1, wherein the signal transmitter is programmed to automatically  
2           transmit the control signals to the recording device at programmed times.
- 1     12.    The system of claim 1, wherein the remote control codes are configured to program the  
2           recording device to automatically record a program at a programmed time.
- 1     13.    The system of claim 1, wherein the signal transmitter comprises a personal digital  
2           assistant.
- 1     14.    The system of claim 1, wherein the signal transmitter comprises a cellular phone.
- 1     15.    The system of claim 1, further comprising a recording device configured to receive the  
2           remote control signals.
- 1     16.    The system of claim 15, wherein the recording device comprises a video cassette  
2           recorder.

- 1      17.      The system of claim 15, wherein the recording device comprises a digital video recorder.
- 1      18.      The system of claim 15, wherein the recording device comprises an audio recorder.
- 1      19.      The system of claim 18, wherein the audio recorder comprises:
- 2              a.          a wireless receiver;
- 3              b.          an audio tuner coupled to the wireless receiver; and
- 4              c.          a programmable digital recorder coupled to the audio tuner, the programmable
- 5                      digital recorder configured to receive remote control codes over the wireless
- 6                      receiver from a program server at programmed times.
- 1      20.      The system of claim 2, wherein the program server is configured to select one or more
- 2                      programs from a pool of programs, thereby generating a list of programming information.
- 1      21.      The system of claim 20, wherein the program server is configured to select the one or
- 2                      more programs using a selection criterion.
- 1      22.      The system of claim 21, wherein the selection criterion is that a segment of a program
- 2                      title matches a target string.
- 1      23.      The system of claim 21, wherein the selection criterion is that a season number of a
- 2                      program matches a predetermined season number.
- 1      24.      The system of claim 1, wherein the signal transmitter is coupled to the recording device
- 2                      by an infra red transmitter.

- 1     25.     The system of claim 1, wherein the signal transmitter is coupled to the recording device  
2             by a radio frequency transmitter.
- 1     26.     The system of claim 1, wherein the signal transmitter is coupled to the recording device  
2             by a serial bus.
- 1     27.     The system of claim 1, further comprising a radio frequency extender coupling the first  
2             unit to the recording device.
- 1     28.     The system of claim 3, wherein the remote host and the signal transmitter are a single  
2             machine.
- 1     29.     A system comprising:  
2             a.       means for programmably generating one or more remote control codes used to  
3                   record a program on a recording device; and  
4             b.       means for translating the remote control codes into control signals for controlling  
5                   the recording device, the means for transmitting further configured to transmit the  
6                   control signals to the recording device.
- 1     30.     A method of recording a program, the method comprising:  
2             a.       transmitting one or more remote control codes to a first device;  
3             b.       receiving the remote control codes on the first device;  
4             c.       translating the remote control codes into control signals to control a recording  
5                   device to record a program; and  
6             d.       transmitting the control signals from the first device to the recording device.

- 1     31.     The method of claim 30, further comprising translating programming information related  
2             to the occurrence of a program into a sequence of the remote control codes.
- 1     32.     The method of claim 31, wherein the sequence of remote control codes corresponds to a  
2             key sequence for recording a program.
- 1     33.     The method of claim 32, wherein the program is a broadcast video program.
- 1     34.     The method of claim 32, wherein the program is a broadcast audio program.
- 1     35.     The method of claim 32, wherein the remote control codes are transmitted to the first  
2             device at programmed times.
- 1     36.     The method of claim 32, wherein the remote control codes relate to programming the  
2             recording device to record a program at a programmed time.
- 1     37.     The method of claim 30, wherein the recording device comprises a video cassette  
2             recorder.
- 1     38.     The method of claim 30, wherein the recording device comprises a digital video recorder.
- 1     39.     The method of claim 30, wherein the recording device comprises an audio recorder.
- 1     40.     The method of claim 30, further comprising presenting a pool of programs from which  
2             one or more programs can be selected for recording.

- 1     41.     The method of claim 31, further comprising:  
2             a.     selecting one or more programs from the pool of programs; and  
3             b.     translating programming information related to the occurrences of the programs  
4                 into the remote control codes.
- 1     42.     The method of claim 41, wherein selecting a program is performed on second device  
2             coupled to the first device.
- 1     43.     The method of claim 42, wherein the first device is coupled to the second device over a  
2             wide area network.
- 1     44.     The method of claim 43, wherein the wide area network comprises the Internet.
- 1     45.     The method of claim 43, wherein the first device and the second device are coupled over  
2             a local area network.
- 1     46.     The method of claim 41, wherein selecting the programs and translating the programming  
2             information are performed on a single machine.
- 1     47.     The method of claim 41, wherein the selected programs are selected according to a  
2             selection criterion.
- 1     48.     The method of claim 47, wherein the selection criterion is that a segment of a program  
2             title matches a target string.
- 1     49.     The method of claim 47, wherein the selection criterion is that a season number of a  
2             program matches a predetermined season number.

- 1      50.    A method of recording a program, the method comprising:
- 2            a.      wirelessly receiving programming information corresponding to the broadcast of
- 3            the program;
- 4            b.      tuning a receiver according to the programming information to receive the
- 5            program; and
- 6            c.      storing the program.
- 1      51.    The method of claim 50, further comprising selecting one or more programs from a pool
- 2            of programs, thereby generating a list of programming information, and wirelessly
- 3            transmitting the list to the receiver.
- 1      52.    The method of claim 51, wherein the one or more programs are selected from a pool of
- 2            programs using a selection criterion.
- 1      53.    The method of claim 52, wherein the selection criterion is that a segment of a program
- 2            title matches a target string.
- 1      54.    The method of claim 52, wherein the selection criterion is that a season number of a
- 2            program matches a predetermined season number.
- 1      55.    The method of claim 50, wherein the program is a broadcast video program.
- 1      56.    The method of claim 50, wherein the program is a broadcast audio program.

- 1     57.    A network of devices comprising:
- 2           a.     a program server configured to select one or more programs from a pool of
- 3                 programs, thereby generating a list of programming information, the program
- 4                 server further configured to translate the list of programming information into
- 5                 remote control codes;
- 6           b.     a signal transmitter configured to receive the remote control codes from the
- 7                 program server, the signal transmitter configured to translate the remote control
- 8                 codes into control signals and to transmit the control signals to a recording device;
- 9                 and
- 10          c.     a recording device configured to receive the control signals for recording a
- 11                 program.
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- 1     58.    The network of devices of claim 57, wherein the programming information corresponds
- 2           to the occurrence of a broadcast program.
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- 1     59.    The network of devices of claim 58, wherein the broadcast program is a broadcast video
- 2           program.
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- 1     60.    The network of devices of claim 58, wherein the broadcast program is a broadcast audio
- 2           program.
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- 1     61.    The network of devices of claim 57, wherein the signal transmitter is programmed to
- 2           automatically transmit the remote control codes to the recording device at programmed
- 3           times.
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- 1     62.    The network of devices of claim 57, wherein the remote control codes program the
- 2           recording device to record the program at a programmed time.



- 1     63.     The network of devices of claim 57, wherein the recording device comprises a video  
2             cassette recorder.
- 1     64.     The network of devices of claim 57, wherein the recording device comprises a digital  
2             video recorder.
- 1     65.     The network of devices of claim 57, wherein the recording device comprises an audio  
2             recorder.
- 1     66.     The network of devices of claim 57, wherein the program server is coupled to the signal  
2             transmitter over a local area network.
- 1     67.     The network of devices of claim 57, wherein the program server is coupled to the signal  
2             transmitter over a wide area network.
- 1     68.     The network of devices of claim 67, wherein the wide area network comprises the  
2             Internet.
- 1     69.     The network of devices of claim 57, wherein the program server is configured to select  
2             one or more programs from the pool of programs using a selection criteria.
- 1     70.     The network of devices of claim 57, wherein the signal transmitter comprises an infra red  
2             transmitter electronically coupling the signal transmitter and the recording device.
- 1     71.     The network of devices of claim 57, wherein the signal transmitter comprises a radio  
2             frequency transmitter electronically coupling the signal transmitter and the recording  
3             device.

1     72.     The network of devices of claim 57, wherein the signal transmitter comprises a serial bus  
2             electronically coupling the signal transmitter and the recording device.

1     73.     A system comprising:

- 2             a.     a program signal source for receiving a program signal;  
3             b.     a first device coupled to the program signal source, the first device for  
4                 transmitting the program signal;  
5             c.     a second device configured to receive and store the transmitted program signal;  
6                 and  
7             d.     a signal transmitter configured to transmit remote control codes to the program  
8                 signal source, thereby controlling the transmission of program signals from the  
9                 first device to the second device.

1     74.     The system of claim 73, wherein the program signal source is one of a cable box or a  
2             satellite box.

1     75.     The system of claim 73, wherein the second device comprises a digital video recorder.

1     76.     The system of claim 73, wherein the second device comprises a video cassette recorder.

1     77.     The system of claim 73, wherein the first device is configured to transmit the program  
2             signal using radio frequency waves and the signal transmitter is configured to transmit the  
3             remote control codes using radio frequency waves.

1     78.     The system of claim 73, further comprising a program server coupled to the second  
2             device, the program server configured to transmit the remote control codes to the second  
3             device, the remote control codes related to the recording of a program.

- 1      79.      The system of claim 78, wherein the program is a broadcast video program.
- 1      80.      The system of claim 78, wherein the program is a broadcast audio program.
- 1      81.      The system of claim 78, wherein the program server is coupled to the second device over  
2              a wide area network.
- 1      82.      The system of claim 81, wherein the wide area network comprises the Internet.
- 1      83.      The system of claim 78, wherein the program server is coupled to the second device over  
2              a local area network.